



**JULY TIP SAVINGS: \$100-\$300/YR**

**Avoided Emissions of CO<sub>2</sub>: Up to 100 lbs./YR**

# **\$USTAINABILITY \$AVINGS TIP**

## **HARVEST MULTIPLE BENEFITS WITH RAINWATER COLLECTION**

*Free water boosts plant growth and reduces potential pollution*

July is not only Smart Irrigation Month, but it's also our summer monsoon season. Here are our top five best reasons to take advantage of rainwater harvesting.

### **1. RAIN IS FREE**

While we are well below normal in our rainfall so far this year, we do average almost 8-inches a year. And, with a typical Arizona desert home, we have rooftops, driveways and sidewalks that make prime catchment areas. In fact, the rooftop of a 1500 square-foot home can collect almost 500 gallons from ½-inch of rain!

A typical home rooftop can collect 500 gallons of water from just ½-inch of rain. That's enough to flush a toilet over 300 times.

### **2. IT'S GOOD FOR YOUR PLANTS**

Rainwater is a clean, salt-free source of water that contains many beneficial ingredients for plants. Rain can contain sulfur, potash, several other minerals and even microorganisms, all of which provide a boost to plant growth. During summer thundershowers there can even be an added bonus when lightening converts atmospheric nitrogen into a nitrogen solution for plants.

### **3. YOU CAN HELP REPLENISH GROUNDWATER**

Typically, rain falls and seeps underground to become groundwater in aquifers and/or it feeds rivers or lakes. However, the concrete, asphalt and land grading of cities have disrupted this cycle. An ASU study showed that 60% of Tempe north of U.S. Highway 60 is impervious to water. What an even more compelling reason to collect as much rainwater as we can in our landscapes whether at our homes properties, businesses or along our city streets.

### **4. IT WILL IMPROVE YOUR SOIL AND THE ENVIRONMENT**

Rain is naturally distilled through evaporation prior to cloud formation making it one of the purest sources of water. This means that it's one of the best ways to dilute salt buildup that naturally occurs in our soils because we have so little rainfall and due to adding our 'hard' water to the landscape with each irrigation. It is recommended to run your irrigation an extra cycle or two in the summer to help wash excess salts past the root zone of plants where it can cause leaf burn and other plant problems. But, if we get a good monsoon and you are collecting rainwater on your landscape, these extra irrigations will not be necessary. And, there's one more benefit to mention. Any applied fertilizers, insect granules or sprayed weeds stay on your property when you harvest rainwater, instead of running off where they can negatively impact our natural waterways.



### **5. GRAVITY IS ALWAYS THERE TO HELP**

Start from your highest water catchment surfaces (i.e. rooftop) and allow gravity to carry the water through gutters or channels to where you want it to provide the greatest benefit. Water harvesting systems can range from simple to complex. Go outside during your next rainstorm (if there's no lightening) and observe how the water flows off your structures and property. Then look for books on [Rainwater Harvesting](#) by Tucson author Brad Lancaster or check out some of the great references below to learn more about how to implement water harvesting techniques at your home:

### **CHECKLIST FOR SAVINGS**

- ☐ **Call (480) 644-3306** to request a free booklet titled *Harvesting Rainwater for Landscape Use*.
- ☐ **Visit** our online water harvesting resources at [www.mesaaz.gov/conservation](http://www.mesaaz.gov/conservation).
- ☐ **Find books** on harvesting rainwater at the City of Mesa libraries.

### **\$START \$AVING**

Start saving on your water bill while doing your part for *building a sustainable community*. Visit our Web site for more sustainability savings tips at [www.mesaaz.gov/sustainability](http://www.mesaaz.gov/sustainability).

*Learn to live Green*